



# Agent Orange Brief

Prepared by the Environmental Agents Service (131)

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VA Central Office, Washington, DC 20420

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## AGENT ORANGE – THE PROBLEM ENCOUNTERED IN RESEARCH

### Why was the CDC Agent Orange Study canceled?

In December 1979, Congress directed the Veterans Administration, now known as the Department of Veterans Affairs (VA), to conduct a large-scale epidemiologic study to determine if Agent Orange has caused health problems in Vietnam veterans. For approximately 3 years VA and its contractor attempted to develop an adequate protocol or study design. VA, at the suggestion of Congress, then transferred responsibility of the study to the Centers for Disease Control (CDC).

Unfortunately after several years of research, CDC found that military records were unable to identify individuals who were exposed to Agent Orange in Vietnam. Subsequently, CDC did a special Agent Orange Validation Study to determine the feasibility of conducting the Agent Orange Study using indirect estimates of exposure to Agent Orange from military records (and self reports) and by comparing such measures with serum levels of 2,3,7,8-TCDD (dioxin). CDC maintained that the findings of the Agent Orange Validation Study confirmed conclusively that neither military records nor veterans' self reports of exposure to Agent Orange can identify exposed individuals needed for a full scale study.

This conclusion was agreed to by a CDC advisory group, the Science Panel of the Domestic Policy Council Agent Orange Working Group, and the Agent Orange Advisory Panel of the Congressional Office of Technology Assessment. Consequently, the study was canceled. Some people believe that an index of Agent Orange exposure for ground troops could still possibly be developed.

### What can be done?

While the CDC Agent Orange Study could not be successfully completed, a substantial number of related research efforts have been completed and published, and other scientific studies are ongoing. VA, CDC, Air Force, and several other departments, agencies and organizations have been doing this important research. For information about these projects, see **Agent Orange Brief, C2 and C3.**

In July 1993, the Institute of Medicine (IOM) of the National Academy of Sciences recommended that a nongovernmental organization with appropriate

experience in historical exposure reconstruction be commissioned to develop and test models of herbicide exposure for use in studies of Vietnam veterans. The IOM further recommended that these models be evaluated by an independent nongovernmental scientific panel established for this purpose. The IOM indicated that if the panel determines that a valid exposure reconstruction model is feasible, VA and other government agencies should facilitate additional epidemiologic studies of Vietnam veterans. Secretary Brown concurred, and VA is taking action to implement these recommendations where feasible.

VA has contracted with the IOM to develop an historical exposure reconstruction model for Agent Orange. The IOM issued a call for proposals to develop the exposure model. Dr. Stellman at Columbia University was selected by IOM for this study. The IOM will review the results and report to VA on the validity of the exposure reconstruction model. Based on the IOM assessment of this model, VA will determine whether it provides an adequate scientific basis for large-scale epidemiologic studies in Vietnam veterans.

In July 1997, in response to IOM recommendations, VA announced a research initiative designed to determine whether it is possible to conduct an epidemiologic study of the long-term health effects of exposure to Agent Orange (and other herbicides used in Vietnam) on Army Chemical Corps Vietnam veterans. The feasibility study analyzed response rates, availability of medical records to validate veterans-reported health history, and other study requirements show that a large-scale study is feasible.

For a pilot study, letters were sent to 500 randomly selected veterans inviting them to participate in this investigation. (Researchers selected study participants carefully to ensure that possible biases are minimized, if not eliminated. Study participants could not recruit or volunteer themselves.) Half of the letters were sent to Vietnam veterans, and half were sent to Vietnam era veterans who did not serve in Vietnam.

The results of the 405 telephonic interviews and 95 serum dioxin measurements conducted during the pilot study were presented to the study oversight committee in October 1998. The pilot study demonstrated that the Army Chemical Corps Vietnam era veterans could be located and were willing to participate in this telephone health interview.

The overall completion rate was 83%. The data also confirmed the fact that these men, often with assistance from their wives, were able to provide considerable detail on the reproductive details for pregnancies of offspring they had fathered. Serum concentrations of dioxins were found to be significantly correlated with the self-reported history by the veteran that he actually participated in the spraying of herbicides during their Vietnam service.

The feasibility study demonstrated that Army Chemical Corps Vietnam era veterans, a group of veterans with significant exposure, could be located and were willing to participate in this telephone health interview. The data also confirmed that these men, often with assistance from their 2,500

Vietnam and 2,500 non-Vietnam veterans who served in the Army Chemical Corps. The main phase, which began in February 1999, is expected to take 30 months to complete.

**Who should be contacted for additional information regarding the cancellation of the CDC Agent Orange Study and the difficulties experienced in pursuing Agent Orange research?**

Questions concerning the CDC Study can be directed to the National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, Georgia 30333. Other matters can be handled by the Registry Physician at the nearest VA medical center or by the Environmental Agents Service (131), Department of Veterans Affairs, 810 Vermont Avenue, N.W., Washington, DC 20420.